

ANSWERS

5. $y + 4 = 3(x + 1)$

6. $y + 4 = \frac{1}{2}(x - 2)$

7. $x = -2$

8. $y - 15 = \frac{3}{2}(x - 4)$

9. $y = -6$

10. $-\frac{1}{2}$

11. -3

12. $\frac{4}{3}$

13. 2

14. undefined

15. 0

16. $y - 3 = \frac{1}{2}(x - 2)$

17. $x = 1$

18. $y - 4 = -\frac{3}{2}(x - 3)$

19. $y - 1 = 2(x - 4)$

20. $y = 6$

Reteaching—Chapter 6

Lesson 6.1

1. $x > 60$

2. $m \geq 25.5$

3. $m \geq 1$

4. $a < -8$

5. $z \leq 4$

6. $b \leq -14$

7. $x > 30$

8. $b \leq 13$

9. $y > 15$

10. $s > 67.1$

11. $z \leq -5$

12. $x > 61,450$

13. $200 \leq S \leq 600$

14. $6 \leq S < 30$

15. $45 \leq S \leq 99$

16. $9 < S < 23$

Lesson 6.2

1. $y \leq 15$

2. $a > 8$

3. $m < 8$

4. $b \leq -3$

5. $r > -12$

6. $d \geq -40$

7. $x < 8$

8. $p \geq -5$

9. $y \leq 3$

10. $x + 5 \geq 8; x \geq 3$

11. $0.12x \geq 5; 50$

12. $9x \leq 85$; no more than 9 T-shirts

13. $1.65c \leq 20$; no more than 12 cards

14. $4.75x \geq 120$; at least 26 hours

15. $y \leq 5$

16. $a > 8$

17. $m \leq 5$

ANSWERS

18. $b < 60$

19. $x \geq 10$

20. $p < 7$

21. $z \geq -5$

22. $d < 2$

23. $m \leq 4$

24. $x < 2$

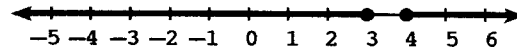
25. Let x represent the range of numbers.
 $3x + 8 < -7$; $x < -5$

26. Let x represent the number of gallons of juice that Sam can buy.
 $2.50x + 8 \leq 20$; 4 gallons or less

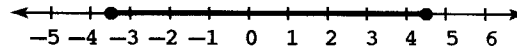
27. Let x represent the number of T-shirts that Sue can buy.
 $9x + 30 \leq 50$; 2 T-shirts or less

28. Let x represent the number of bottles of soda that Rafael and Sally need to bring.
 $2x + 7 \geq 25$; at least 9 bottles each

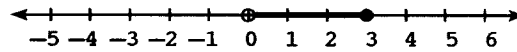
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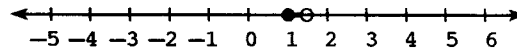
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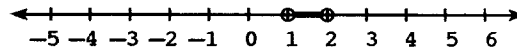
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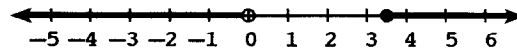
9. $1 \leq x < 1.5$



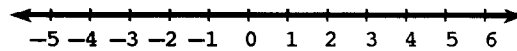
10. $1 < x < 2$



11. $x < 0$ or $x \geq 3.5$

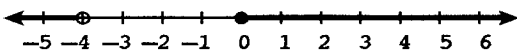


12. all real numbers

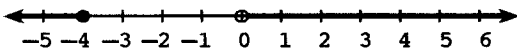


Lesson 6.3

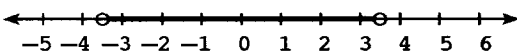
1.



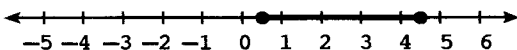
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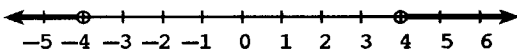
3.



4.



5.



Lesson 6.4

1. 8

2. 15

3. 7

4. 7

5. 9

6. 9

7. 16

8. 16

9. 0

10. 19

11. 19

12. 10

ANSWERS

13. 40

14. 10

15. Domain: all real numbers
Range: all nonnegative numbers

16. Domain: all real numbers
Range: all nonnegative numbers

17. Domain: all real numbers
Range: all nonpositive numbers

18. Domain: all real numbers
Range: $y \geq -3$

19. Domain: all real numbers
Range: $y \leq 1$

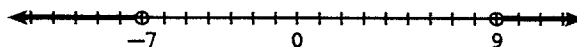
20. Domain: all real numbers
Range: all nonnegative numbers

21. Domain: all real numbers
Range: $y \geq 6$

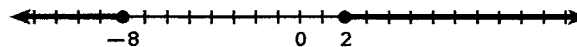
22. Domain: all real numbers
Range: all nonnegative numbers

12. $x = -3$ or $x = 2\frac{1}{2}$

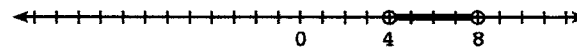
13. $x < -7$ or $x > 9$



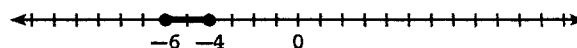
14. $x \leq -8$ or $x \geq 2$



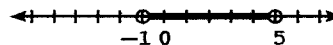
15. $4 < x < 8$



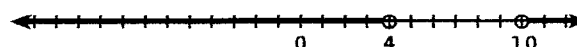
16. $-6 \leq x \leq -4$



17. $-1 < x < 5$



18. $x < 4$ or $x > 10$



Reteaching—Chapter 7

Lesson 7.1

1. (2, 2)
2. (1, 2)
3. about 76 feet
4. about 7.3 meters by 12.7 meters

Lesson 7.2

1. (-1, -4)
2. (4.5, 2)
3. (12, 1)
4. (2, 1)
5. (3, 5)
6. (-9, -7)

Lesson 6.5

1. $x = 8$ or $x = -12$
2. $x = 4$ or $x = 14$
3. $x = 1$ or $x = 5$
4. $x = 15$ or $x = 9$
5. $x = 6$ or $x = 4$
6. $x = 11$ or $x = -25$
7. $x = 6$ or $x = -5$
8. $x = 3$ or $x = 2\frac{1}{3}$
9. $x = 4$ or $x = -5$
10. $x = 2$ or $x = -18$
11. $x = 4$ or $x = -\frac{4}{5}$

ANSWERS

7.
$$\begin{cases} x + y = 346 \\ x = \frac{1}{3}(y - 6) \end{cases}$$

85 and 261

8.
$$\begin{cases} x + y = 90 \\ x = \frac{2}{3}y \end{cases}$$

 54° and 36°

9.
$$\begin{cases} r = 3s \\ r + s = 28 \end{cases}$$

Raul is 21 years old and Sara is 7 years old.

10.
$$\begin{cases} x + y = 8000 \\ 0.07x + 0.05y = 500 \end{cases}$$

\$5000 at 7% and \$3000 at 5%

Lesson 7.3

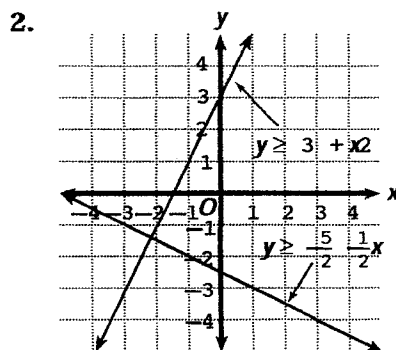
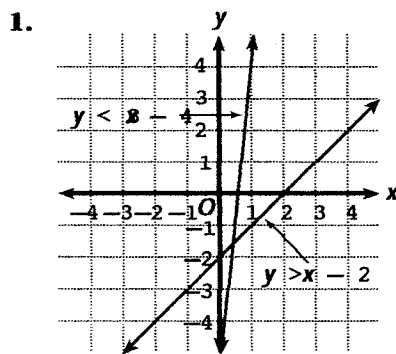
1. (10, 15)
2. (-1, 2)
3. (0.2, 8)
4. (4, -0.5)
5. (2, -1)
6. (4, 3)
7. (5, 1)
8. (2, 0)
9. (1.2, -0.6)
10. (2, 2)
11. (6, 4)
12. (4, -1)
13.
$$\begin{cases} t + c = 114 \\ 12t + 9c = 1242 \end{cases}$$

72 T-shirts and 42 baseball caps

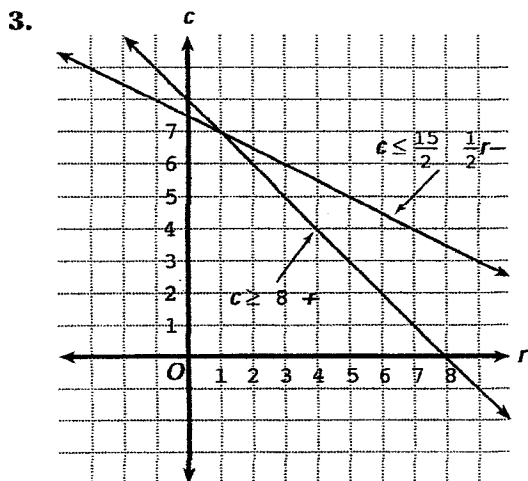
Lesson 7.4

1. inconsistent
2. (3, 1); consistent
3. (0, 2); consistent
4. inconsistent
5. consistent and dependent
6. inconsistent
7. (-6, 8); consistent and independent
8. inconsistent
9. consistent and dependent
10. consistent and dependent
11. (3, 4); consistent and independent
12. (0.5, 1.2); consistent and independent

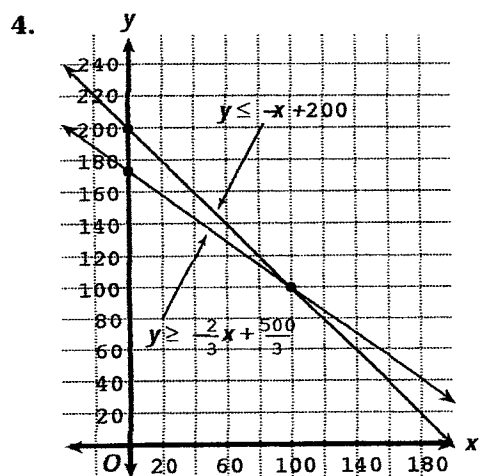
Lesson 7.5



ANSWERS



Answers may vary. Sample answer:
(5, 5) and (8, 2)



Answers may vary. Sample answer:
(180, 20) and (100, 100)

Lesson 7.6

1. $\begin{cases} x = y + 1 \\ x + y = 27 \end{cases}$

Joel is 13 years old; Roberto is 14 years old

2. $\begin{cases} x = 3y \\ x + 6 = 2(y + 6) \end{cases}$

Latisha is 18 years old now.

3. $\begin{cases} p + n = 260 \\ p + 5n = 432 \end{cases}$

43 nickels and 217 pennies

4. $\begin{cases} n + q = 57 \\ 5n + 25q = 725 \end{cases}$

22 quarters and 35 nickels

5. $\begin{cases} x + y = 42 \\ 32x + 40y = 1440 \end{cases}$

thirty 32-cent stamps and twelve 40-cent stamps

6. $\begin{cases} t + u = 12 \\ u = 3t \end{cases}$

39

7. $\begin{cases} t + u = 10 \\ 2(10t + u) - 1 = 10u + t \end{cases}$

37

Reteaching—Chapter 8

Lesson 8.1

1. 625

2. 81

3. 1,000,000

4. 128

5. 32,768

6. 729

7. 6

8. 10,000

9. 144

10. 1

11. $3^9 = 19,683$

12. $2^7 = 128$

13. $10^8 = 100,000,000$

14. $5^7 = 78,125$

15. $8^{10} = 1,073,741,824$

16. $4^6 = 4096$

17. $15a^5$

18. $-21c^3d^2$

Answers

20. $(-1, -2)$; consistent and independent
21. $(-2, 2)$; consistent and independent
22. $\left(0, \frac{11}{7}\right)$; consistent and independent
23. infinitely many solutions; consistent and dependent
24. no solution; inconsistent
25. infinitely many solutions; consistent and dependent
26. no solution; inconsistent
27. $(1, 2)$; consistent and independent
28. $\left(\frac{2}{26}, \frac{6}{13}\right)$; consistent and independent
29. $(4, 4)$; consistent and independent
30. $(6, -17)$; consistent and independent

Lesson 7.4

Level C

1. $x = -2, y = 7$
2. consistent and independent
3. They have different slopes.
4. infinitely many solutions
5. consistent and dependent
6. They have the same slope.
7. $AB: y = 3x - 3, CD: y = 3x + 2$; no solution
8. inconsistent
9. Answers will vary. Sample answer:
 $y = -3x - 3$
10. 285 pounds, 220 pounds
11. 51, 12

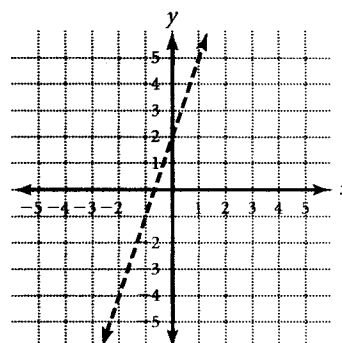
12. $p = -8$

13. $\text{Juan} = 135 + 2.1t, \text{Tom} = 2.1t$. These form an inconsistent system and have no solution. Since the event of Tom catching Juan is represented by the intersection of this system, it can never happen.

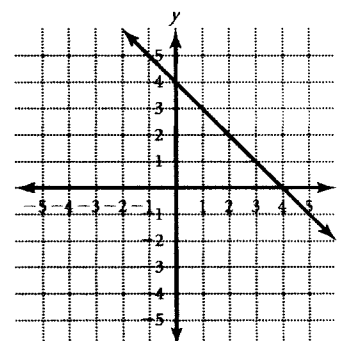
Lesson 7.5

Level A

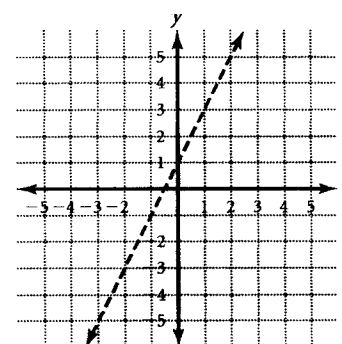
1. yes



2. yes

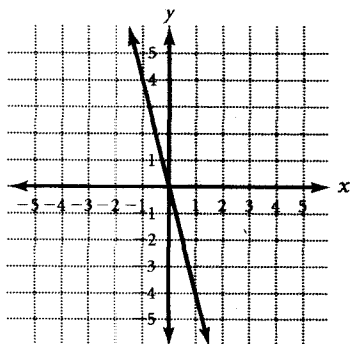


3. yes

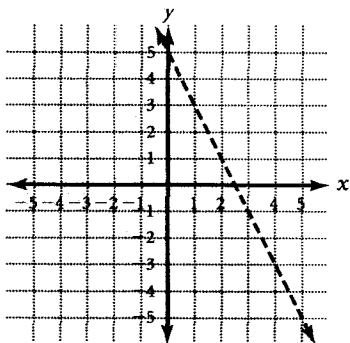


Answers

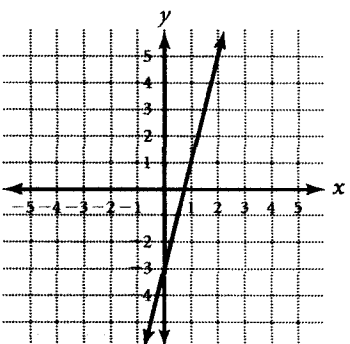
4. yes



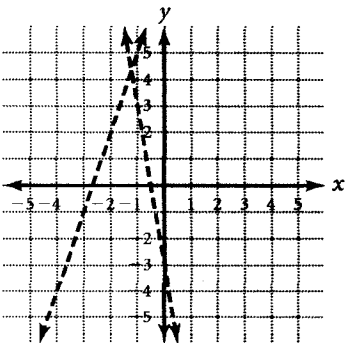
5. yes



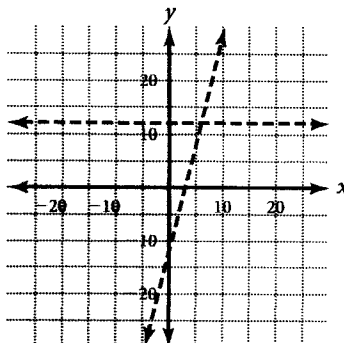
6. yes



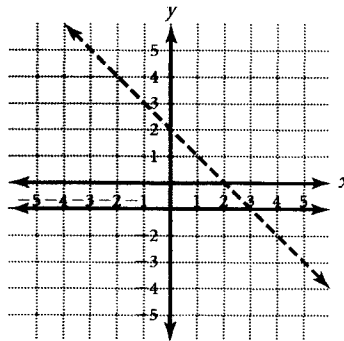
7.



8.

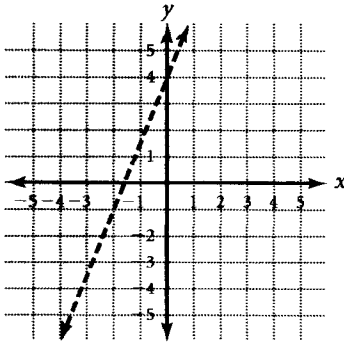


9.



Lesson 7.5 Level B

1.



2.

